



California Cooperative
Snow Surveys
Bulletin 120-5-01

State of California
The Resources Agency

Department of
Water Resources

Water Conditions in California

Report 1 February 1, 2005



Arnold Schwarzenegger
Governor
State of California

Mike Chrisman
Secretary for Resources
The Resources Agency

Lester A. Snow
Director
Department of Water Resources

STATE OF CALIFORNIA
Arnold Schwarzenegger, Governor

THE RESOURCES AGENCY
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COOPERATING AGENCIES

Public Agencies

Buena Vista Water Storage District
East Bay Municipal Utility District
Eldorado Irrigation District
Friant Water Users Association
Kaweah Delta Water Conservation District
Kern Delta Water District
Kings River Conservation District
Lower Tule River Irrigation District
Merced Irrigation District
Modesto Irrigation District
Nevada Irrigation District
North Kern Water Storage District
Northern California Power Agency
Oakdale Irrigation District
Omochumne-Hartnell Water District
Oroville-Wyandotte Irrigation District
Placer County Water Agency
Sacramento Municipal Utility District
San Joaquin Exchange Contractors Water Association
South San Joaquin Irrigation District
Tri-Dam Project
Truckee River Basin Water Commission
Tulare Lake Basin Water Storage District
Turlock Irrigation District
Yuba County Water Agency
Private Organizations
J.G. Boswell Company
Kaweah and St. Johns River Association
Kings River Water Association
Tule River Association
State Water Project Contractors

Municipalities

City of Bakersfield Water Department
City of Los Angeles Department of Water and Power
City and County of San Francisco Hetch Hetchy Water and Power

State Agencies

University of California
Central Sierra Snow Laboratory
Scripps Institution of Oceanography
California Department of Forestry & Fire Protection
California Department of Water Resources

Public Utilities

Pacific Gas and Electric Company
Southern California Edison Company

Federal Agencies

U.S. Department of Agriculture
Forest Service(14 National Forests)
Natural Resource Conservation Service
U.S. Department of Commerce
National Weather Service
U.S. Department of Interior
Bureau of Reclamation
Geological Survey, Water Resources
National Park Service(3 National Parks)
U.S. Department of Army
Corps of Engineers

Other Cooperative Programs

Nevada Cooperative Snow Surveys
Oregon Cooperative Snow Surveys

Summary of Water Conditions

February 1, 2005

The water supply outlook for most of California at this time is excellent due to the heaviest snowpack on this date in 10 years. The pattern showed a reversal of the past several years with much above normal precipitation in southern California and near average in the north; the only dry area was the northeastern portion of the State, extending into the Klamath River basin in Oregon. There is still a wide range of possible outcomes of the season since about 40 percent of the rainy season is left; some caution is warranted to see if the next two months are productive.

Forecasts of April through July runoff are substantially above average, especially in the southern Sierra and stand at 115 percent overall. As noted above, the upper Klamath River, at 65 percent, is the exception. Water year forecasts are also good at 100 percent of average.

Snowpack water content is 165 percent of average compared to 115 percent last year. It ranges from twice average in the southern Sierra to about 125 percent on the North Coast. The pack is 100 percent of the April 1 average, which is the normal date of maximum accumulation. Percentages are highest in the lower elevation snow zone, which may lead to some early runoff this year.

Precipitation from October through January 31 was about 150 percent of average, much more than the 85 percent last year. Southern California's percentages are very large. January precipitation was about 145 percent of average and came on the heels of a wet December which had an estimated 150 percent of average.

Runoff so far this season is below average at 70 percent compared to 75 percent one year ago. January runoff was 75 percent of average. There was flooding in early January on a number of southern California streams. Sacramento River basin runoff was quite modest during the month at 65 percent of average. Estimated runoff of the eight major rivers of the Sacramento and San Joaquin River regions during January was 2.5 million acre-feet.

Reservoir storage is about 100 percent of average, about the same as last year. The gain in January was more than normal. Regional percentages range from 125 in the Central Coast to a low 25 percent in the North Lahontan region. The low percentage is due to low storage in the region's biggest reservoir, Lake Tahoe.

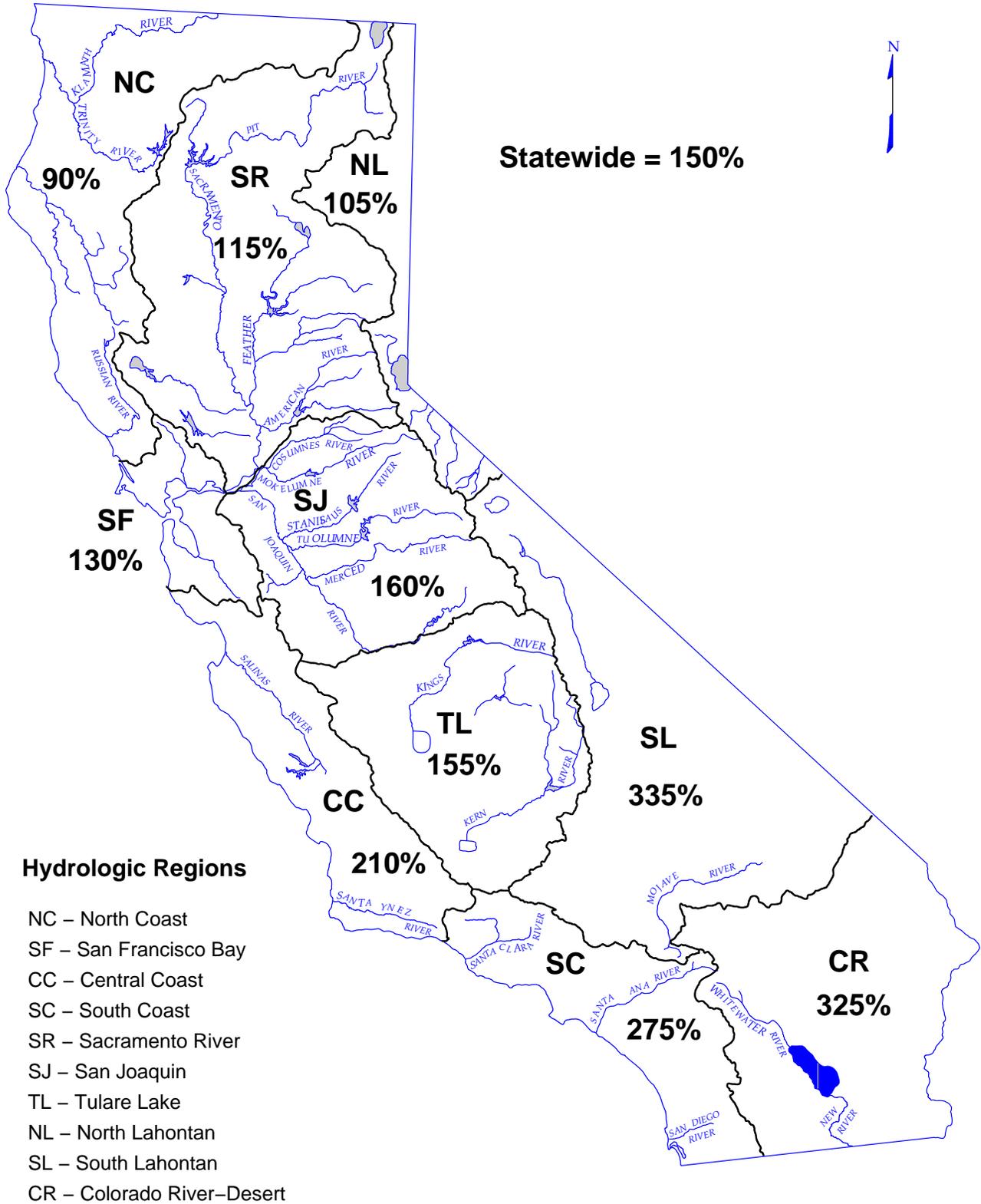
SUMMARY OF WATER CONDITIONS IN PERCENT OF AVERAGE

HYDROLOGIC REGION	PRECIPITATION OCTOBER 1 TO DATE	FEBRUARY 1 SNOW WATER CONTENT	FEBRUARY 1 RESERVOIR STORAGE	RUNOFF OCTOBER 1 TO DATE	APR-JULY RUNOFF FORECAST	WATER YEAR RUNOFF FORECAST
NORTH COAST	90	125	95	60	95	90
SAN FRANCISCO BAY	130	--	115	100	--	--
CENTRAL COAST	210	--	125	240	--	--
SOUTH COAST	275	--	110	310	--	--
SACRAMENTO RIVER	115	135	95	70	95	85
SAN JOAQUIN RIVER	160	180	110	120	130	125
TULARE LAKE	155	205	75	105	135	130
NORTH LAHONTAN	105	180	25	65	115	105
SOUTH LAHONTAN	335	205	100	70	135	125
COLORADO RIVER- DESERT	325	--	--	--	--	--
STATEWIDE	150	165	100	70	115	100

SEASONAL PRECIPITATION

IN PERCENT OF AVERAGE TO DATE

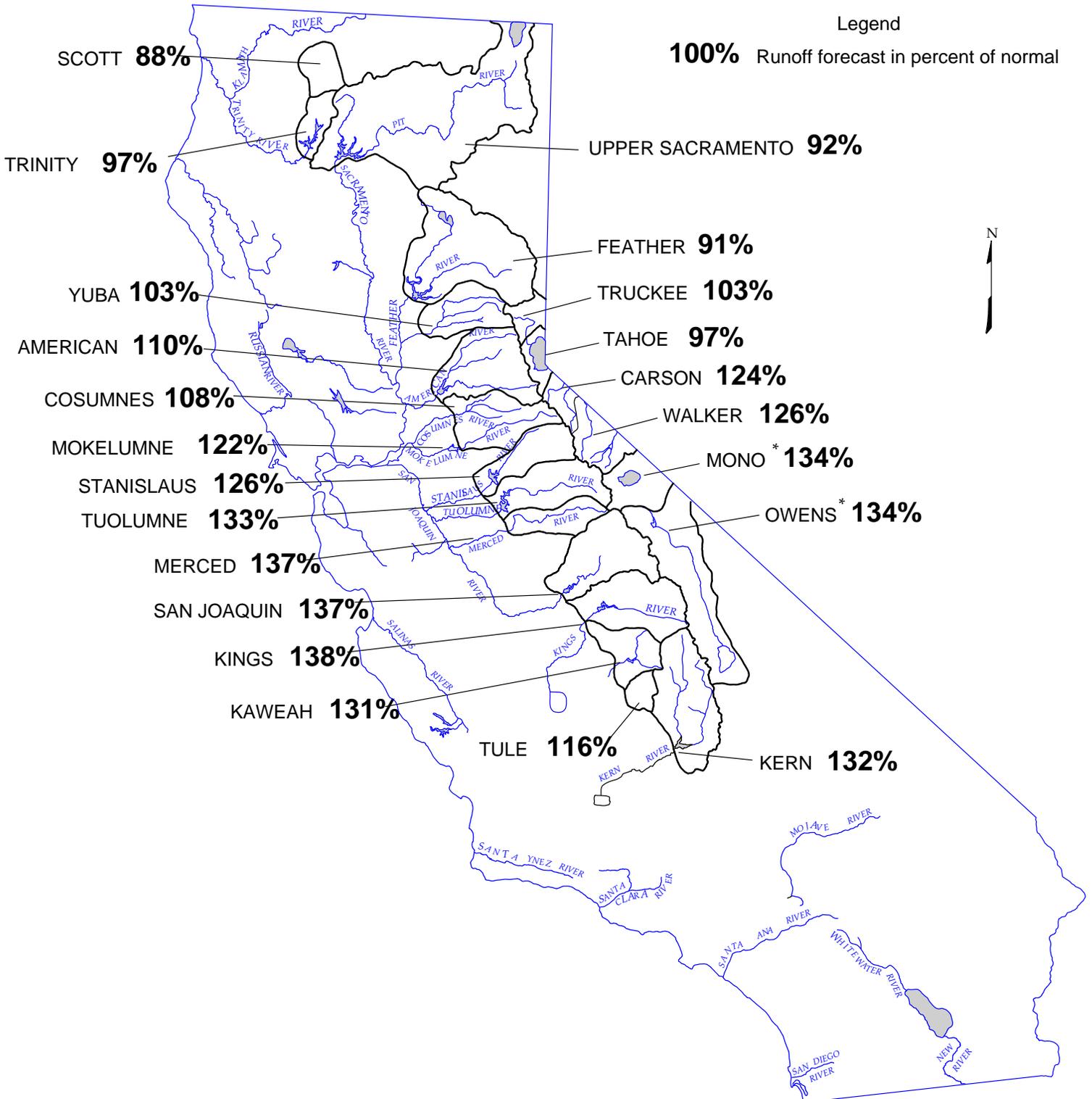
October 1, 2004 through January 31, 2005



WATER YEAR IS OCTOBER 1 THROUGH SEPTEMBER 30

**DEPARTMENT OF WATER RESOURCES
CALIFORNIA COOPERATIVE SNOW SURVEYS
FORECAST OF APRIL – JULY
UNIMPAIRED SNOWMELT RUNOFF**

February 1, 2005



* FORECAST BY DEPARTMENT OF WATER AND POWER, CITY OF LOS ANGELES

**FEBRUARY 1, 2005 FORECASTS
APRIL-JULY UNIMPAIRED RUNOFF**

HYDROLOGIC REGION and Watershed	Unimpaired Runoff in 1,000 Acre-Feet (1)					
	HISTORICAL			FORECAST		
	50 Yr Avg (2)	Max of Record	Min of Record	Apr-Jul Forecasts	Pct of Avg	80 % Probability Range (1)
SACRAMENTO RIVER						
Upper Sacramento River						
Sacramento River at Delta above Shasta Lake (3)	299	711	39	290	97%	
McCloud River above Shasta Lake	400	850	185	390	98%	
Pit River near Montgomery Creek + Squaw Creek	1,090	2,098	480	900	83%	
Total Inflow to Shasta Lake	1,849	3,525	726	1,700	92%	1,140 - 2,650
Sacramento River above Bend Bridge, near Red Bluff	2,521	5,075	943	2,250	89%	1,370 - 3,620
Feather River						
Feather River at Lake Almanor near Prattville (3)	333	675	120	300	90%	
North Fork at Pulga (3)	1,028	2,416	243	930	90%	
Middle Fork near Clito (4)	86	518	4	75	87%	
South Fork at Ponderosa Dam (3)	110	267	13	105	95%	
Feather River at Oroville	1,870	4,676	392	1,700	91%	1,100 - 2,910
Yuba River						
North Yuba below Goodyears Bar (3)	286	647	51	300	105%	
Inflow to Jackson Mdws and Bowman Reservoirs (3)	112	236	25	115	103%	
South Yuba at Langs Crossing (3)	233	481	57	230	99%	
Yuba River near Smartville plus Deer Creek	1,044	2,424	200	1,080	103%	690 - 1,790
American River						
North Fork at North Fork Dam (3)	262	716	43	290	111%	
Middle Fork near Auburn (3)	522	1,406	100	590	113%	
Silver Creek Below Camino Diversion Dam (3)	173	386	37	200	116%	
American River below Folsom Lake	1,282	3,074	229	1,410	110%	910 - 2,160
SAN JOAQUIN RIVER						
Cosumnes River at Michigan Bar	130	363	8	140	108%	80 - 270
Mokelumne River						
North Fork near West Point (5)	437	829	104	510	117%	
Total Inflow to Pardee Reservoir	469	1,065	102	570	122%	430 - 840
Stanislaus River						
Middle Fork below Beardsley Dam (3)	334	702	64	430	129%	
North Fork Inflow to McKays Point Dam (3)	224	503	34	290	129%	
Stanislaus River below Goodwin Reservoir (7)	716	1,710	116	900	126%	630 - 1,210
Tuolumne River						
Cherry Creek & Eleanor Creek near Hetch Hetchy (3)	322	727	97	410	127%	
Tuolumne River near Hetch Hetchy (3)	606	1,392	153	800	132%	
Tuolumne River below La Grange Reservoir (7)	1,230	2,682	301	1,630	133%	1,250 - 2,130
Merced River						
Merced River at Pohono Bridge (3)	362	888	80	510	141%	
Merced River below Merced Falls (7)	633	1,587	123	870	137%	660 - 1,140
San Joaquin River						
San Joaquin River at Mammoth Pool (6)	1,014	2,279	235	1,370	135%	
Big Creek below Huntington Lake (6)	95	264	11	135	142%	
South Fork near Florence Lake (6)	202	511	58	270	134%	
San Joaquin River inflow to Millerton Lake	1,262	3,355	262	1,730	137%	1,280 - 2,300
TULARE LAKE						
Kings River						
North Fork Kings River near Cliff Camp (3)	239	565	50	340	142%	
Kings River below Pine Flat Reservoir	1,234	3,113	274	1,700	138%	1,240 - 2,300
Kaweah River below Terminus Reservoir	290	814	62	380	131%	270 - 560
Tule River below Lake Success	65	259	2	75	116%	40 - 125
Kern River						
Kern River near Kernville (3)	373	1,203	83	510	137%	
Kern River inflow to Lake Isabella	470	1,657	84	620	132%	410 - 940

(1) See inside back cover for definition

(2) All 50 year averages are based on years 1951-2000 unless otherwise noted

(3) 50 year average based on years 1941-90

(4) 44 year average based on years 1936-79

(5) 36 year average based on years 1936-72

(6) 45 year average based on years 1936-81

**FEBRUARY 1, 2005 FORECASTS
WATER YEAR UNIMPAIRED RUNOFF**

HISTORICAL			Unimpaired Runoff in 1,000 Acre-Feet (1)								FORECAST		
50 Yr Avg (2)	Max of Record	Min of Record	Oct Thru Jan*	Feb	Mar	Apr	May	Jun	Jul	Aug & Sep	Water Year Forecasts	Pct of Avg	80 % Probability Range (1)
888	1,965	165											
1,234	2,353	557											
3,217	5,150	1,484											
6,194	10,796	2,479	1,535	700	750	670	500	300	230	410	5,095	82%	4,020 - 7,085
8,990	17,180	3,294	2,465	1,150	1,050	860	670	420	300	520	7,435	83%	5,490 - 10,465
780	1,269	366											
2,417	4,400	666											
219	637	24											
291	562	32											
4,775	9,492	994	750	400	600	650	590	300	160	150	3,600	75%	2,535 - 5,630
564	1,056	102											
181	292	30											
379	565	98											
2,459	4,926	369	345	250	350	390	430	210	50	45	2,070	84%	1,445 - 3,205
616	1,234	66											
1,070	2,575	144											
318	705	59											
2,830	6,382	349	500	310	400	490	560	290	70	25	2,645	93%	1,880 - 3,885
409	1,253	20	99	70	75	75	45	17	3	2	386	94%	260 - 655
626	1,009	197											
774	1,800	129	115	70	95	140	235	160	35	10	860	111%	670 - 1,220
471	929	88											
1,196	2,952	155	230	120	140	240	350	240	70	25	1,415	118%	1,050 - 1,840
461	1,147	123											
770	1,661	258											
1,974	4,631	383	440	180	230	350	570	510	200	40	2,520	128%	2,030 - 3,160
461	1,020	92											
1,014	2,787	150	280	140	160	180	315	280	95	35	1,485	146%	1,190 - 1,850
1,337	2,964	308											
112	298	14											
248	653	71											
1,851	4,642	362	300	150	180	325	590	565	250	90	2,450	132%	1,890 - 3,160
284	607	58											
1,736	4,287	386	240	130	160	290	590	560	260	95	2,325	134%	1,760 - 3,070
460	1,402	94	70	50	60	85	140	115	40	15	575	125%	420 - 820
153	615	16	34	30	35	34	25	11	5	3	177	116%	110 - 275
558	1,577	163											
741	2,318	175	110	50	85	130	220	180	90	55	920	124%	640 - 1,350

* Unimpaired runoff in prior months based on measured flows

(7) Forecast point names based on USGS gage names. Stanislaus below Goodwin also known as inflow to New Melones, Tuolumne River below La Grange also known as inflow to Don Pedro, Merced River below Merced Falls also known as inflow to McClure.

**FEBRUARY 1, 2005 FORECASTS
APRIL-JULY UNIMPAIRED RUNOFF**

HYDROLOGIC REGION and Watershed	Apr-Jul Unimpaired Runoff in 1,000 Acre-Feet (1)				
	HISTORICAL			FORECAST	
	50 Yr Avg (2)	Max of Record	Min of Record	Apr-Jul Forecasts	Pct of Avg

NORTH COAST

Trinity River

Trinity River at Lewiston Lake (3) 660 1,593 80 **640** 97%

Scott River

Scott River near Fort Jones 200 400 30 **175** 88%

Klamath River

Total inflow to Upper Klamath Lake (4) 515 939 149 **335** 65%

NORTH LAHONTAN

Truckee River

Lake Tahoe to Farad accretions 272 713 52 **280** 103%
 Lake Tahoe Rise (assuming gates closed, in ft) 1.4 5.4 0.2 **1.4** 97%

Carson River

West Fork Carson River at Woodfords 55 135 12 **65** 117%
 East Fork Carson River near Gardnerville 190 407 43 **240** 126%

Walker River

West Walker River below Little Walker, near Coleville 153 330 35 **190** 124%
 East Walker River near Bridgeport 65 209 7 **85** 130%

SOUTH LAHONTAN

Owens River

Total tributary flow to Owens River (5) 235 579 96 0%

**FEBRUARY 1, 2005 FORECASTS
WATER YEAR UNIMPAIRED RUNOFF**

HYDROLOGIC REGION and Watershed	Water Year Unimpaired Runoff in 1,000 Acre-Feet (1)					
	HISTORICAL			FORECAST		
	50 Yr Avg (2)	Max of Record	Min of Record	Water Year Forecasts	Pct of Avg	80 % Probability Range (1)

NORTH COAST

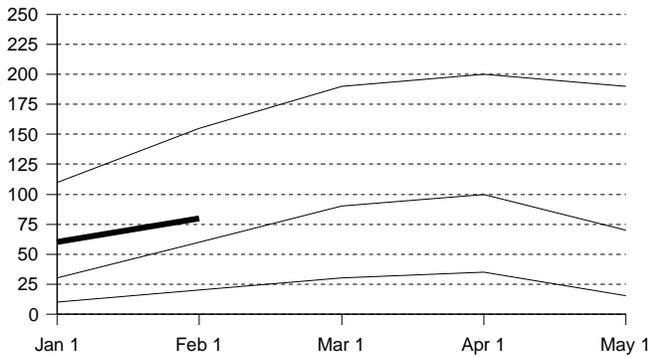
Trinity River

Trinity River at Lewiston Lake (3) 1,411 2,990 200 **1,286** 91% 910 - 1860

- (1) See inside back cover for definition
- (2) All 50 year averages are based on years 1951-2000 unless otherwise noted
- (3) Forecast by DWR and National Weather Service California-Nevada River Forecast Center.
- (4) Forecast by U.S. Natural Resources Conservation Service and National Weather Service California-Nevada River Forecast Center, April through September forecast, 30 year average based on years 1971-2000.
- (5) Forecast by Department of Water and Power, City of Los Angeles, average based on years 1951-2000.

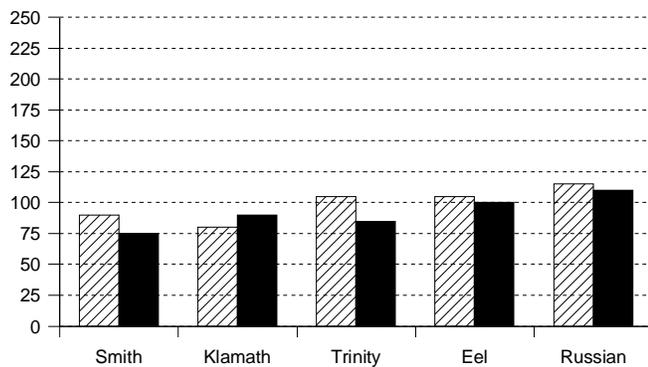
Snowpack Accumulation

Water Content in % of April 1 Average



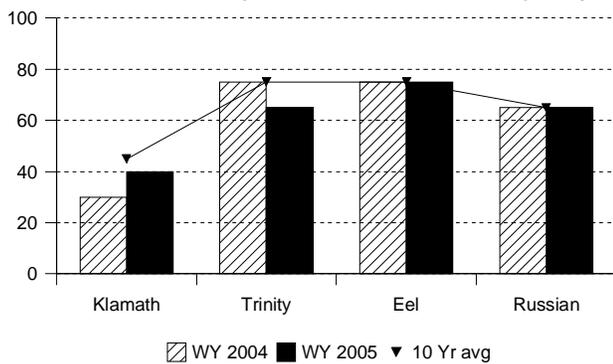
Precipitation

October 1 to date in % of Average



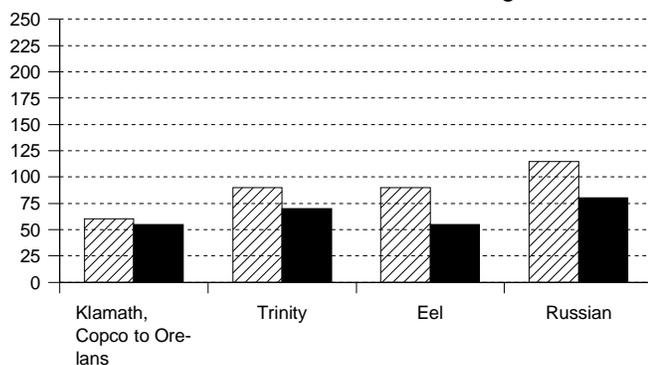
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



NORTH COAST REGION

SNOWPACK- First of the month measurements made at 12 snow courses indicate an area wide snow water equivalent of 24 inches. This is 125 percent of the February 1 average and 80 percent of the seasonal (April 1) average. Last year at this time the pack was holding 26 inches of water.

PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on this area was 90 percent of normal. Precipitation last month was about 65 percent of the monthly average. Seasonal precipitation at this time last year stood at 100 percent of normal.

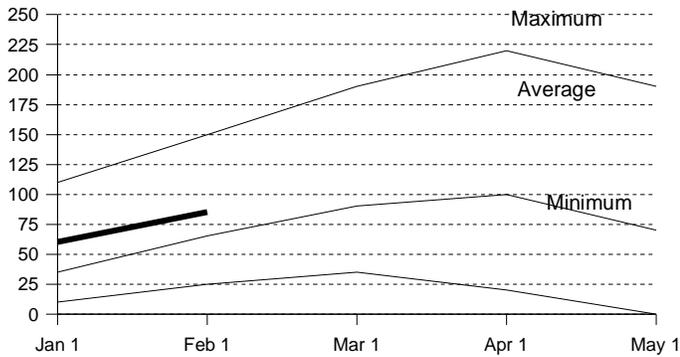
RESERVOIR STORAGE- First of the month storage in 7 reservoirs was 2.0 million acre-feet which is 95 percent of average. About 65 percent of available capacity was being used. Storage in these reservoirs at this time last year was 105 percent of average.

RUNOFF -Seasonal runoff of streams draining the area totaled 3.2 million acre-feet which is 60 percent of the average for this period. Last year, runoff for the same period was 85 percent of average.

SACRAMENTO RIVER REGION

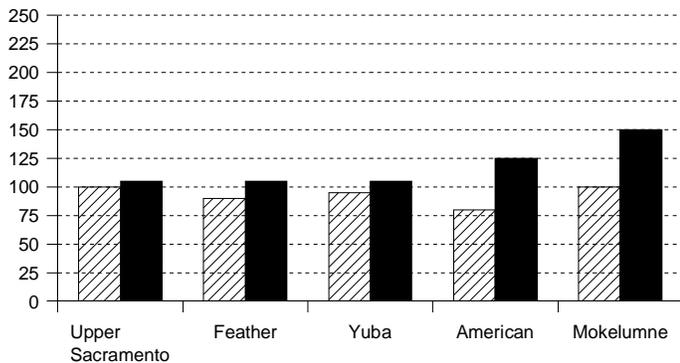
Snowpack Accumulation

Water Content in % of April 1 Average



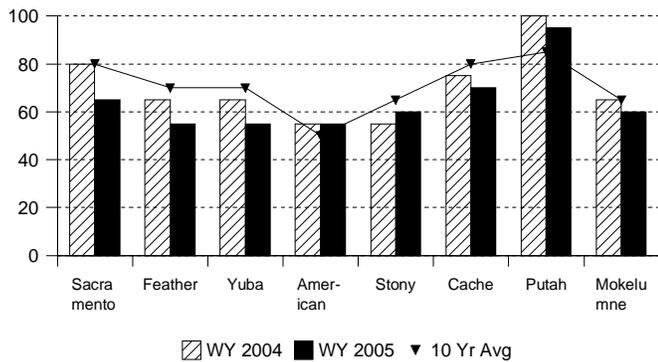
Precipitation

October 1 to date in % of Average



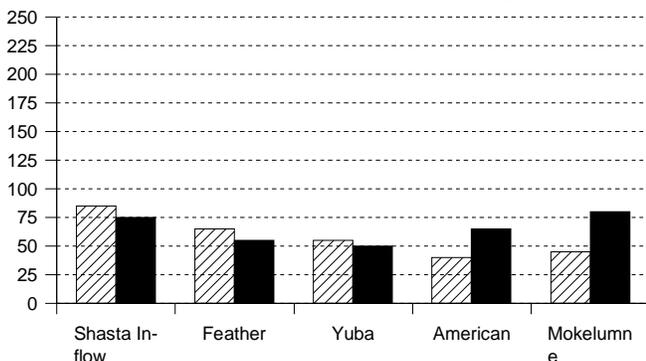
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



SNOWPACK- First of the month measurements made at 69 snow courses indicate an area wide snow water equivalent of 25.6 inches. This is 135 percent of the February 1 average and 85 percent of the seasonal (April 1) average. Last year at this time the pack was holding 24.8 inches of water.

PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on this area was 115 percent of normal. Precipitation last month was about 95 percent of the monthly average. Seasonal precipitation at this time last year stood at 95 percent of normal.

RESERVOIR STORAGE- First of the month storage in 43 reservoirs was 10 million acre-feet which is 95 percent of average. About 60 percent of available capacity was being used. Storage in these reservoirs at this time last year was 110 percent of average.

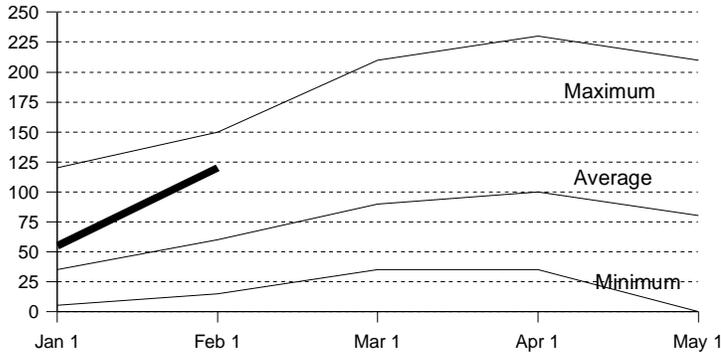
RUNOFF - Seasonal runoff of streams draining the area totaled 4.1 million acre-feet which is 70 percent of average for this period. Last year, runoff for the same period was 75 percent of average.

The **Sacramento Region 40-30-30 Water Supply Index** is forecast to be 7.5 assuming median meteorological conditions for the remainder of the year. This classifies the year as "below normal" in the Sacramento Valley according to the State Water Resources Control Board.

SAN JOAQUIN RIVER AND TULARE LAKE REGIONS

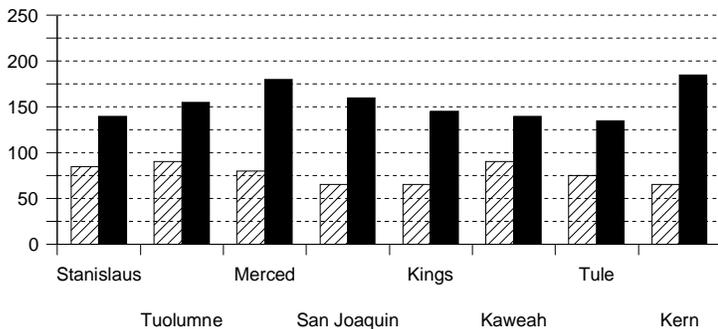
Snowpack Accumulation

Water Content in % of April 1 Average



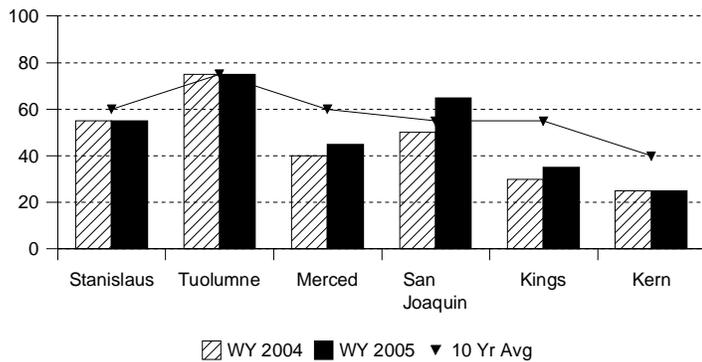
Precipitation

October 1 to date in % of Average



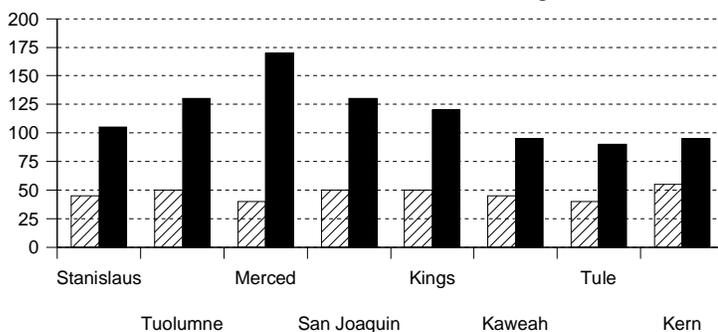
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



SNOWPACK- First of the month measurements made at 62 **San Joaquin River Region** snow courses indicate an area wide snow water equivalent of 34.6 inches. This is 180 percent of the February 1 average and 115 percent of seasonal (April 1) average. Last year at this time the pack was holding 22.3 inches of water.

At the same time 43 **Tulare Lake Region** snow courses indicated a basin-wide snow water equivalent of 28.8 inches which is 205 percent of the average for February 1 and 125 percent of the seasonal average. Last year at this time the basin was holding 14.8 inches of water.

PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the **San Joaquin Region** was 160 percent of normal. Precipitation last month was about 165 percent of the monthly average. Seasonal precipitation at this time last year stood at 85 percent of normal.

Seasonal precipitation on the **Tulare Lake Region** was 155 percent of normal. Precipitation last month was about 190 percent of the monthly average. Seasonal precipitation at this time last year stood at 75 percent of normal.

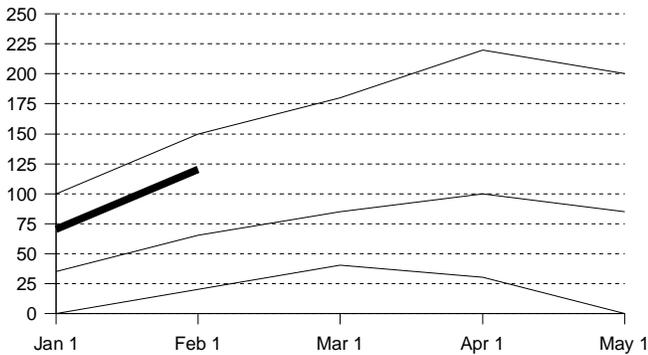
RESERVOIR STORAGE- First of the month storage in 34 **San Joaquin Region** reservoirs was 7.6 million acre-feet which is 110 percent of average. About 65 percent of available capacity was being used. Storage in these reservoirs at this time last year was 105 percent of average.

First of the month storage in 6 **Tulare Lake Region** reservoirs was 567 thousand acre-feet which is 75 percent of average and about 25 percent of available capacity. Storage in these reservoirs at this time last year was 70 percent of average.

RUNOFF- Seasonal runoff of streams draining the **San Joaquin Region** totaled 1.46 million acre-feet which is 120 percent of average for this period. Last year, runoff for the same period was 45 percent of average. Seasonal runoff of streams draining the **Tulare Lake Basin** totaled 459 thousand acre-feet which is 105 percent of average for this period. Last year runoff for this same period was 50 percent of average. The **San Joaquin Region 60-20-20 Water Supply Index** is forecast to be 4.0 assuming median meteorological conditions. This classifies the year as "wet!" in the San Joaquin Region according to the State Water Resources Control Board.

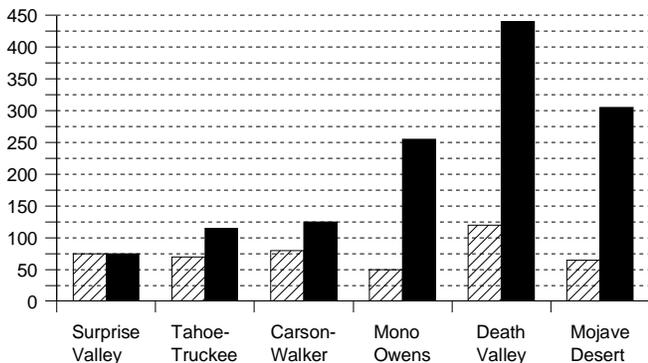
Snowpack Accumulation

Water Content in % of April 1 Average



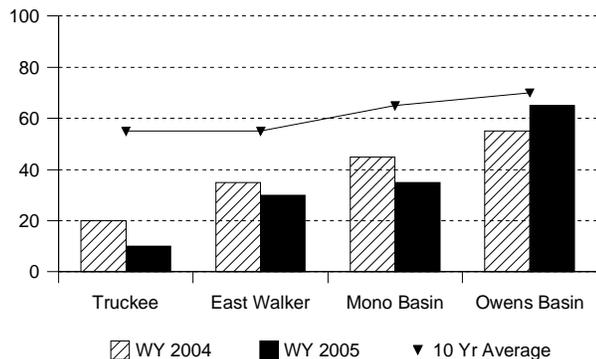
Precipitation

October 1 to date in % of Average



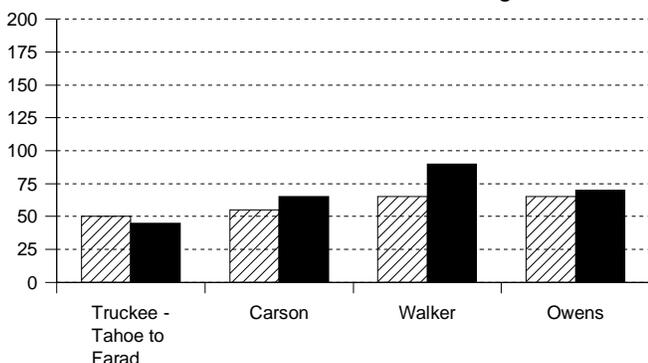
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



NORTH AND SOUTH LAHONTAN REGIONS

SNOWPACK- First of the month measurements made at 14 **North Lahontan snow** courses indicate an area wide snow water equivalent of 24 inches. This is 110 percent of the February 1 average and 180 percent of seasonal (April 1) average. Last year at this time the pack was holding 14.9 inches of water. At the same time 19 **South Lahontan Region** snow courses indicated a basin-wide snow water equivalent of 25.4 inches which is 205 percent of the average for February 1 and 130 percent of the seasonal average. Last year at this time the basin was holding 12.1 inches of water.

PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the **North Lahontan Region** was 105 percent of normal. Precipitation last month was about 90 percent of the monthly average. Seasonal precipitation at this time last year stood at 75 percent of normal. Seasonal precipitation on the **South Lahontan Region** was 335 percent of normal. Precipitation last month was about 430 percent of the monthly average. Seasonal precipitation at this time last year stood at 80 percent of normal.

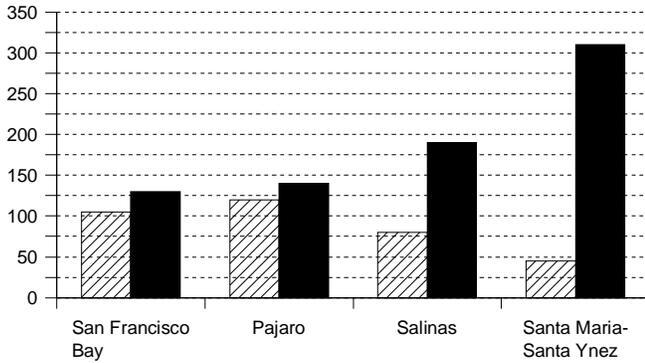
RESERVOIR STORAGE- First of the month storage in 5 **North Lahontan** reservoirs was 134 thousand acre-feet which is 25 percent of average. About 15 percent of available capacity was being used. Storage in these reservoirs at this time last year was 35 percent of average. Lake Tahoe was 0.07 foot above its natural rim on February 1. First of the month storage in 8 **South Lahontan** reservoirs was 266 thousand acre-feet which is 100 percent of average and about 65 percent of available capacity. Storage in these reservoirs at this time last year was 95 percent of average.

RUNOFF- Seasonal runoff of streams draining the **North Lahontan Region** totaled 100 thousand acre-feet which is 65 percent of average for this period. Last year, runoff for the same period was 55 percent of average. Seasonal runoff of the Owens River in the **South Lahontan Region** totaled 31 thousand acre-feet which is 70 percent of average for this period. Last year runoff for this same period was 65 percent of average.

SAN FRANCISCO BAY AND CENTRAL COAST REGIONS

Precipitation

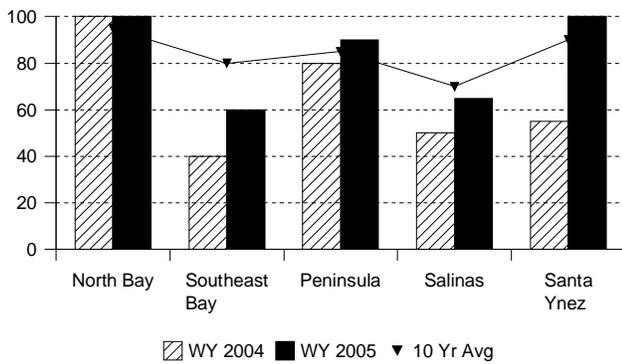
October 1 to date in % of Average



PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the **San Francisco Bay Region** was 130 percent of normal. Precipitation last month was about 95 percent of the monthly average. Seasonal precipitation at this time last year stood at 105 percent of normal. Seasonal precipitation on the **Central Coast Region** was 210 percent of normal. Precipitation last month was about 205 percent of the monthly average. Seasonal precipitation at this time last year stood at 85 percent of normal.

Reservoir Storage

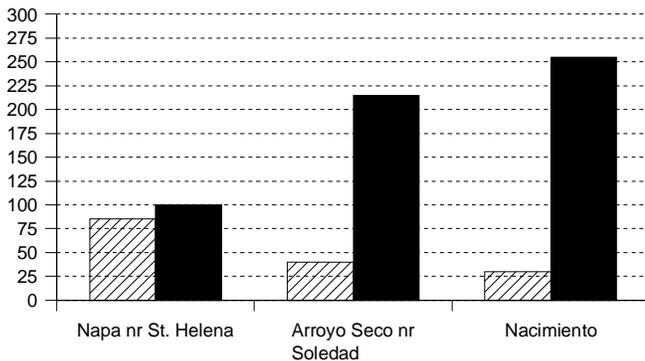
Contents of major reservoirs in % of capacity



RESERVOIR STORAGE- First of the month storage in 18 **San Francisco Bay Region** reservoirs was 390 thousand acre-feet which is 115 percent of average. About 70 percent of available capacity was being used. Storage in these reservoirs at this time last year was 90 percent of average. First of the month storage in 6 **Central Coast Region** reservoirs was 719 thousand acre-feet which is 125 percent of average and about 75 percent of available capacity. Storage in these reservoirs at this time last year was 85 percent of average.

Runoff

October 1 to date in % of average



RUNOFF- Seasonal runoff of the Napa River in the **San Francisco Bay Region** totaled 35 thousand acre-feet which is 100 percent of average for this period. Last year, runoff for the same period was 85 percent of average. Seasonal runoff of streams draining the **Central Coast Region** totaled 310 thousand acre-feet which is 240 percent of average for this period. Last year runoff for this same period was 35 percent of average.

SOUTH COAST REGION

PRECIPITATION - October through January (seasonal) precipitation on the **South Coast Region** was 275 percent of normal. January precipitation was 290 percent of the monthly average. Seasonal precipitation at this time last year was 40 percent of normal. Seasonal precipitation on the **Colorado River-Desert Region** was 325 percent of normal. Last year seasonal precipitation on the **Colorado River-Desert Region** was 30 percent of normal. Precipitation in January was about 330 percent of average.

RESERVOIR STORAGE - February 1 storage in 29 major **South Coast Region** reservoirs was 1.5 million acre-feet or 110 percent of average. About 75 percent of available capacity was being used. Storage in these reservoirs at this time last year was 85 percent of average. On February 1 combined storage in Lakes Powell, Mead, Mohave and Havasu was about 25.8 million acre-feet or about 60 percent of average. About 50 percent of available capacity was in use. Last year at this time, these reservoirs were storing 70 percent of average.

RUNOFF - Seasonal runoff from selected **South Coast Region** streams totaled about 52 thousand acre-feet which is 310 percent of average. Seasonal runoff from these streams last year was 25 percent of average.

COLORADO RIVER

The April -July inflow to Lake Powell is forecast to be 9.0 million acre-feet, which is 115 percent of average. The February 1 snowpack in the Colorado River basin above Lake Powell was 130 percent of average, lowest in the Yampa at 90 percent and highest in the Duchesne at 195 percent.

STATE WATER PROJECT

Total storage in major SWP reservoirs was about 3.74 MAF, compared with about 3.94 MAF at this time in 2004. On January 31 storage at Lake Oroville was about 1.81 MAF as compared to 2.46 MAF last year. The State's share of San Luis Reservoir storage was about 1.01 MAF, as compared with 810 TAF at this time last year. The combined storage in SWP's southern reservoirs was about 639 TAF, compared with about 6662 TAF at this time last year.

SWP water deliveries for January 2005 were about 125 TAF. This is a combination of project, transfer, and exchange waters. This is about 50 TAF less than delivered during the same period in 2004. The SWP approved an initial delivery allocation of 40% (1.65 MAF) of contractor's initial request on November 30, 2004. Based on recent water precipitation and an updated snow survey, the Department increased it's allocation on January 14, 2005 to 60% (2.48 MAF).

CENTRAL VALLEY PROJECT

As of January 31, 2005, CVP storage was 7.1 million acre-feet, which is a decrease of 1.1 million acre-feet compared to one year ago and is approximately 98% of normal for that date. The Bureau of Reclamation announced the 2005 initial water supply outlook for the CVP contractors on January 21, 2005. Based on a conservative water supply forecast prepared from information available January 1, 2005, and a water year inflow into Shasta Reservoir of 4.2 million acre-feet, CVP water supplies were: Agricultural contractors North of Delta 60% and South of Delta 60%; Urban contractors North of Delta 85% and South of Delta 85%; Sacramento River water rights and San Joaquin Exchange Contractors 100%; Wildlife Refuges 100%; Eastside Division contractors (Stanislaus River) projected to be zero; and Friant Contractors 100% of Class 1. Official allocations will be announced in mid-February. The forecast of CVP operations is available on the Mid-Pacific Region's website at <http://www.usbr.gov/mp>.

**MAJOR WATER DISTRIBUTION PROJECTS
RESERVOIR STORAGE**

(AVERAGES BASED ON 1951-2000 OR PERIOD RECORD)

RESERVOIR	CAPACITY 1,000 AF	AVERAGE STORAGE 1,000 AF	2004 1,000 AF	STORAGE AT END OF January		
				2005 1,000 AF	PERCENT AVERAGE	PERCENT CAPACITY
<i>STATE WATER PROJECT</i>						
Lake Oroville	3,538	2,441	2,459	1,815	74%	51%
San Luis Reservoir (SWP)	1,062	880	809	1,013	115%	95%
Lake Del Valle	77	31	29	37	120%	48%
Lake Silverwood	73	64	70	72	113%	99%
Pyramid Lake	171	163	165	165	101%	96%
Castaic Lake	324	251	302	286	114%	88%
Perris Lake	132	113	120	116	102%	88%
<i>CENTRAL VALLEY PROJECT</i>						
Trinity Lake	2,448	1,766	1,890	1,588	90%	65%
Lake Shasta	4,552	3,122	3,606	2,832	91%	62%
Whiskeytown Lake	241	204	205	212	104%	88%
Folsom Lake	977	514	554	583	114%	60%
New Melones Reservoir	2,420	1,358	1,377	1,340	99%	55%
Millerton Lake	520	338	319	415	123%	80%
San Luis Reservoir (CVP)	971	731	855	797	109%	82%
<i>COLORADO RIVER PROJECT</i>						
Lake Mead	26,159	20,586	15,434	15,119	73%	58%
Lake Powell	24,322	19,269	10,984	8,481	44%	35%
Lake Mohave	1,810	1,675	1,623	1,659	99%	92%
Lake Havasu	619	548	511	558	102%	90%
<i>EAST BAY MUNICIPAL UTILITY DISTRICT</i>						
Pardee Res	198	179	167	180	101%	91%
Camanche Reservoir	417	243	310	307	126%	74%
East Bay (4 res.)	147	127	124	119	94%	81%
<i>CITY AND COUNTY OF SAN FRANCISCO</i>						
Hetch-Hetchy Reservoir	360	155	248	250	161%	69%
Cherry Lake	268	120	225	252	209%	94%
Lake Eleanor	26	9	8	25	263%	95%
South Bay/Peninsula (4 res.)	225	161	122	156	97%	69%
<i>CITY OF LOS ANGELES (D.W.P.)</i>						
Lake Crowley	183	124	107	125	101%	68%
Grant Lake	48	28	25	15	51%	31%
Other Aqueduct Storage (6 res.)	83	75	50	53	70%	63%

TELEMETERED SNOW WATER EQUIVALENTS

February 1, 2005

(AVERAGES BASED ON PERIOD RECORD)

BASIN NAME	STATION NAME	ELEV	INCHES OF WATER EQUIVALENT				
			APRIL 1 AVERAGE	PERCENT Feb 1 OF AVERAGE	24 HRS PREVIOUS	1 WEEK PREVIOUS	
TRINITY RIVER							
	Peterson Flat	7150'	29.2	21.5	73.5	21.5	17.3
	Red Rock Mountain	6700'	39.6	—	—	—	—
	Bonanza King	6450'	40.5	27.8	68.7	27.8	24.8
	Shimmy Lake	6400'	40.3	41.4	102.7	41.4	36.5
	Middle Boulder 3	6200'	28.3	—	—	—	—
	Highland Lakes	6030'	29.9	24.2	81.1	24.2	—
	Scott Mountain	5900'	16.0	19.9	124.5	19.9	17.9
	Mumbo Basin	5650'	22.4	26.9	119.9	26.9	25.4
	Big Flat	5100'	15.8	18.2	115.3	18.2	16.5
	Crowder Flat	5100'	—	1.8	—	1.8	—
SACRAMENTO RIVER							
	Cedar Pass	7100'	18.1	11.1	61.3	11.2	10.4
	Blacks Mountain	7050'	12.7	—	—	—	—
	Sand Flat	6750'	42.4	30.9	73.0	30.9	26.1
	Medicine Lake	6700'	32.6	24.0	73.6	24.0	19.2
	Adin Mountain	6200'	13.6	9.6	70.6	9.6	8.5
	Snow Mountain	5950'	27.0	14.2	52.4	14.2	12.7
	Slate Creek	5700'	29.0	30.0	103.4	30.0	29.0
	Stouts Meadow	5400'	36.0	37.1	103.2	37.1	30.2
FEATHER RIVER							
	Kettle Rock	7300'	25.5	20.9	81.9	20.9	20.4
	Grizzly Ridge	6900'	29.7	22.0	73.9	22.0	20.4
	Pilot Peak	6800'	52.6	—	—	—	—
	Gold Lake	6750'	36.5	35.0	96.0	35.0	32.4
	Humbug	6500'	28.0	34.6	123.6	34.6	31.8
	Rattlesnake	6100'	14.0	23.6	168.9	23.8	22.7
	Bucks Lake	5750'	44.7	34.6	77.3	34.6	32.5
	Four Trees	5150'	20.0	26.3	131.4	26.4	26.4
EEL RIVER							
	Noel Spring	5100'	—	20.3	—	20.3	19.9
YUBA & AMERICAN RIVERS							
	Lake Lois	8600'	39.5	41.2	104.3	41.2	38.9
	Schneiders	8750'	34.5	33.5	97.1	33.5	32.0
	Carson Pass	8353'	—	33.2	—	33.1	—
	Caples Lake	8000'	30.9	27.1	87.7	27.1	25.3
	Alpha	7600'	35.9	—	—	—	—
	Meadow Lake	7200'	55.5	39.8	71.7	39.9	37.5
	Silver Lake	7100'	22.7	24.2	106.7	24.2	22.9
	Central Sierra Snow Lab	6900'	33.6	31.5	93.8	31.5	29.2
	Huysink	6600'	42.6	30.0	70.4	30.0	28.3
	Van Vleck	6700'	35.9	39.6	110.3	39.6	36.8
	Robbs Saddle	5900'	21.4	22.9	106.8	22.8	21.8
	Greek Store	5600'	21.0	32.2	153.1	32.2	29.6
	Blue Canyon	5280'	9.0	12.8	142.2	12.8	—
	Robbs Powerhouse	5150'	5.2	20.3	389.8	20.4	19.6
MOKELUMNE & STANISLAUS RIVERS							
	Deadman Creek	9250'	37.2	20.6	55.3	20.6	19.8
	Highland Meadow	8700'	47.9	35.0	73.2	35.0	32.3
	Gianelli Meadow	8400'	55.5	43.2	77.8	43.2	39.9
	Lower Relief Valley	8100'	41.2	39.6	96.2	39.6	36.6
	Blue Lakes	8000'	33.1	29.5	89.1	29.5	27.0
	Mud Lake	7900'	44.9	44.6	99.2	44.5	41.3
	Stanislaus Meadow	7750'	47.5	39.3	82.8	39.3	35.1
	Bloods Creek	7200'	35.5	31.4	88.6	31.4	28.8
	Black Springs	6500'	32.0	33.0	103.1	33.0	31.1
TUOLUMNE & MERCED RIVERS							
	Tioga Pass Entrance	9945'	—	—	—	—	—
	Dana Meadows	9800'	27.7	20.5	74.0	20.5	19.9
	Slide Canyon	9200'	41.1	34.7	84.5	34.7	32.8
	Lake Tenaya	8150'	33.1	28.6	86.5	28.7	26.6
	Tuolumne Meadows	8600'	22.6	19.7	87.0	19.7	18.3
	Horse Meadow	8400'	48.6	—	—	—	—
	Ostrander Lake	8200'	34.8	33.4	96.0	33.4	30.4
	Paradise Meadow	7650'	41.3	39.7	96.1	39.7	36.4
	Gin Flat	7050'	34.2	30.7	89.7	30.7	28.8
	Lower Kibbie Ridge	6700'	27.4	26.1	95.4	26.2	24.9

SAN JOAQUIN RIVER

Volcanic Knob	10050'	30.1	24.2	80.4	24.2	22.9
Agnew Pass	9450'	32.3	32.2	99.8	32.2	29.6
Kaiser Point	9200'	37.8	33.0	87.3	33.0	29.1
Green Mountain	7900'	30.8	36.1	117.3	36.1	32.5
Tamarack Summit	7550'	30.5	39.1	128.3	39.1	34.3
Chilkoot Meadow	7150'	38.0	48.6	127.8	48.6	45.1
Huntington Lake	7000'	20.1	27.0	134.3	27.0	23.8
Graveyard Meadow	6900'	18.8	33.2	176.8	33.2	30.0
Poison Ridge	6900'	28.9	38.5	133.4	38.5	35.1

KINGS RIVER

Bishop Pass	11200'	34.0	28.5	83.8	28.5	26.5
Charlotte Lake	10400'	27.5	23.7	86.3	23.7	23.4
State Lakes	10300'	29.0	32.4	111.7	32.4	30.0
Mitchell Meadow	9900'	32.9	35.3	107.3	35.3	33.0
Blackcap Basin	10300'	34.3	34.1	99.4	34.1	31.5
Upper Burnt Corral	9700'	34.6	37.3	107.8	37.3	34.8
West Woodchuck Meadow	9100'	32.8	39.8	121.3	39.8	37.0
Big Meadows	7600'	25.9	28.9	111.6	28.9	26.7

KAWEAH & TULE RIVERS

Farewell Gap	9500'	34.5	46.1	133.6	46.1	44.0
Quaking Aspen	7200'	21.0	22.2	105.7	22.2	21.2
Giant Forest	6650'	10.0	16.4	164.0	16.4	15.2

KERN RIVER

Upper Tyndall Creek	11400'	27.7	25.8	93.1	25.8	23.1
Crabtree Meadow	10700'	19.8	21.1	106.7	21.1	20.5
Chagoopa Plateau	10300'	21.8	17.6	81.0	17.6	17.0
Pascoes	9150'	24.9	34.0	136.5	34.0	30.5
Tunnel Guard Station	8900'	15.6	18.5	118.6	18.5	18.0
Wet Meadows	8950'	30.3	34.8	114.9	34.8	32.5
Casa Vieja Meadows	8300'	20.9	21.0	100.5	21.0	20.0
Beach Meadows	7650'	11.0	11.6	105.8	11.6	11.2

SURPRISE VALLEY AREA

Dismal Swamp	7050'	29.2	18.7	64.0	18.8	17.9
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TRUCKEE RIVER

Mount Rose Ski Area	8900'	38.5	33.5	87.0	33.5	32.1
Independence Lake	8450'	41.4	33.6	81.2	33.6	31.9
Big Meadows	8700'	25.7	21.5	83.7	21.5	20.9
Squaw Valley	8200'	46.5	49.0	105.4	49.0	46.4
Independence Camp	7000'	21.8	15.8	72.5	15.8	14.5
Independence Creek	6500'	12.7	17.0	133.9	17.0	15.1
Truckee 2	6400'	14.3	19.6	137.1	19.6	19.0

LAKE TAHOE BASIN

Heavenly Valley	8800'	28.1	24.9	88.6	24.9	23.0
Hagans Meadow	8000'	16.5	15.9	96.4	15.9	14.7
Marlette Lake	8000'	21.1	23.2	110.0	23.2	21.7
Echo Peak 5	7800'	39.5	39.5	100.0	39.5	37.8
Rubicon Peak 2	7500'	29.1	24.7	84.9	24.7	22.7
Tahoe City Cross	6750'	16.0	14.8	92.5	14.8	13.9
Ward Creek 3	6750'	39.4	32.3	82.0	32.3	30.2
Fallen Leaf Lake	6250'	7.0	9.0	128.6	9.1	9.5

CARSON RIVER

Ebbetts Pass	8700'	38.8	30.1	77.6	30.1	27.8
Horse Meadow	8557'	—	18.6	—	18.6	—
Burnside Lake	8129'	—	21.2	—	21.2	—
Forestdale Creek	8017'	—	28.4	—	28.5	—
Poison Flat	7900'	16.2	19.8	122.2	19.8	18.9
Monitor Pass	8350'	—	15.8	—	15.8	15.1
Spratt Creek	6150'	4.5	10.6	235.6	10.6	10.0

WALKER RIVER

Leavitt Lake	9600'	—	55.4	—	55.4	52.5
Summit Meadow	9313'	—	25.8	—	25.8	—
Virginia Lakes	9300'	20.3	22.6	111.3	22.6	21.8
Lobdell Lake	9200'	17.3	20.6	119.1	20.6	20.2
Sonora Pass Bridge	8750'	26.0	27.5	105.8	27.5	25.9
Leavitt Meadows	7200'	8.0	16.0	200.0	16.0	14.6

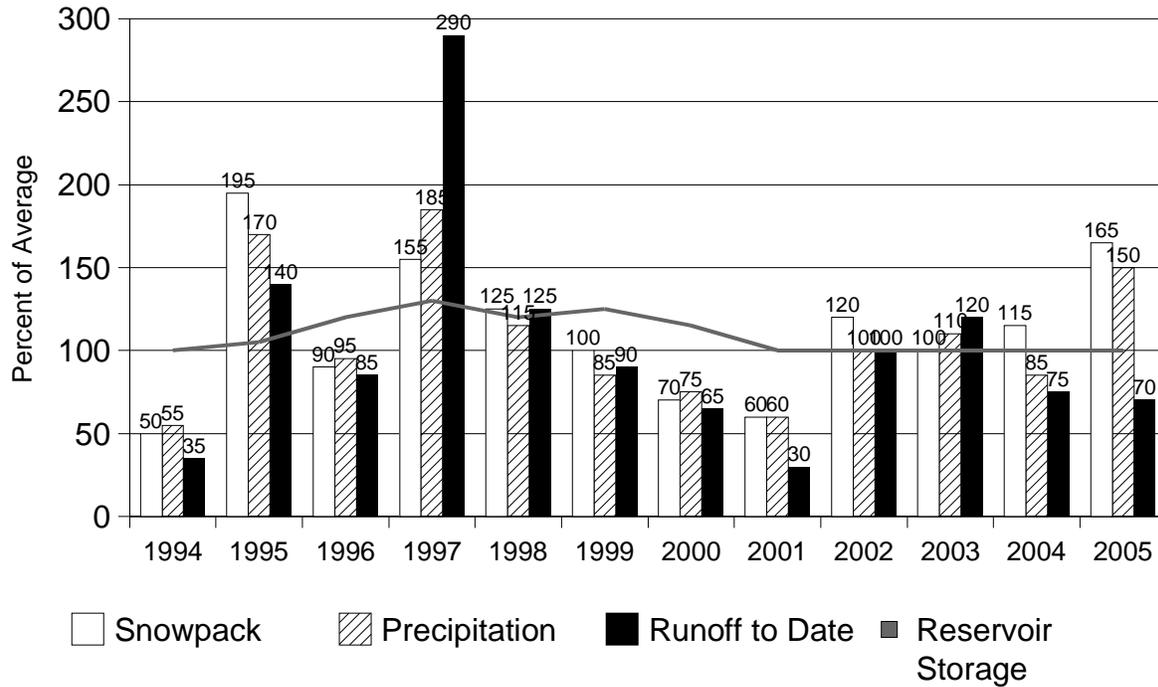
OWENS RIVER/MONO LAKE

Gem Pass	10750'	31.7	44.8	141.4	44.8	42.2
Sawmill	10200'	19.4	19.1	98.4	19.2	19.4
Cottonwood Lakes	10150'	11.6	25.1	216.5	25.2	24.9
Big Pine Creek	9800'	17.9	24.4	136.5	24.4	23.0
South Lake	9600'	16.0	21.7	135.8	21.7	20.9
Mammoth Pass	9300'	42.4	40.3	95.1	40.3	37.8
Rock Creek Lakes	10000'	14.0	16.6	118.6	16.6	15.6

NORMAL SNOWPACK ACCUMULATION EXPRESSED AS A PERCENT OF APRIL 1ST AVERAGE

AREA	JANUARY	FEBRUARY	MARCH	APRIL	MAY
Central Valley North	45%	70%	90%	100%	75%
Central Valley South	45%	65%	85%	100%	80%
North Coast	40%	60%	85%	100%	80%

February 1 Statewide Conditions



SNOWLINES

The 73rd Western Snow Conference (WSC) will be held in Great Falls, Montana 11-14 April 2005, hosted by the North Continental Region. This meeting will be part of the commemoration of the Lewis and Clark expedition. For further information regarding the Western Snow Conference contact Frank Gehrke at 916-574-2635 or gridley@water.ca.gov. Information is available on the web at <http://www.westernsnowconference.org>

Depicted on this month's cover is Dr. James E. Church, Jr. regarded as the founder of snow surveys. Techniques which he developed in the Lake Tahoe watershed early in the last century are the foundation of the program today. This year the California Cooperative Snow Surveys Program celebrates it's 75th year of service to the people of California.

SNOWPACK-Snow data is a major index of spring and summer runoff from Sierra Nevada watersheds. April 1 data historically reflects the magnitude of the snowpack at or near the maximum seasonal accumulation. Averages are based on April 1 data for the period 1951-2000 (50 years, except for data sites established after 1951).

PRECIPITATION -Averages are based on April 1 data for the period 1951-2000 (50 years, except for data sites established after 1951).

RUNOFF AND FORECASTS -Runoff data and runoff forecasts are shown as unimpaired values. Unimpaired runoff represents the natural water production of a river basin, unaltered by upstream diversions, storage, or by export or import of water to or from other watersheds. Forecast of runoff assumes median conditions subsequent to the date of forecast.

Runoff probability ranges are statistically derived from historical data. The 80 percent probability range is comprised of the 90 percent exceedence level value and the 10 percent exceedence level value. This means that actual runoff should fall within the stated limits eight times out of ten.

Runoff averages for most streams are based on the period 1951-2000

Reservoir storage averages are based on the period from 1951(or beginning of operation) to 2000.

For more details contact California Cooperative Snow Surveys, P.O. Box 942836, Sacramento, CA 94236-0001, (916) 574-2635 or gridley@water.ca.gov.

INDICES OF WATER AVAILABILITY

The Sacramento River water year unimpaired runoff is the sum of: Sacramento River above Bend Bridge, Feather river Inflow to Lake Oroville, Yuba River near Smartville and American River Inflow to Folsom Lake.

The Sacramento Valley Water Year Hydrologic Classification (40-30-30 Index). The values 40-30-30 represent the percentage weight given to the three variables in the formula for the index. The first variable is the forecasted unimpaired runoff from April through July(40 percent). The second variable is the forecasted unimpaired runoff from October through March (30 Percent). The third variable is the previous year's index with a cap to account for required flood control releases during wet years. The basins used in this computation are those used in the Sacramento River water year unimpaired runoff.

The San Joaquin Valley Water Year Hydrologic Classification (60-20-20 Index). In a similar manner the values 60-20-20 represents the percentage weights on April through July runoff, October through March runoff and previous year's index. The San Joaquin River unimpaired runoff is the sum of: Stanislaus River Inflow to New Melones Lake, Tuolumne River Inflow to New Don Pedro Reservoir, Merced River Inflow to Lake McClure and San Joaquin River Inflow to Millerton Lake.

Runoff of the eight major river of the Sacramento and San Joaquin Regions is the sum of the runoff in the eight major rivers used in the two above indices.

State of California – The Resources Agency
DEPARTMENT OF WATER RESOURCES
P.O. Box 942836
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First Class

